Non-Tenure Track Promotion Guidelines

Department of Electrical and Computer Engineering (ECE)

Florida International University, Miami, FL

EVALUATION CRITERIA

The evaluation of candidates for promotion is based on three criteria: (1) teaching, (2) research, and (3) service. Here we have two categories for non-tenure track faculty members: the teaching category and the research category. In both categories, the faculty member will have the same level of responsibility in service.

Teaching category

Teaching refers to classroom-related activities, as well as, student mentoring. The basis for evaluation is: (i) student perceptions (SPOTs), (ii) peer evaluation, and (iii) self-reporting. Peer evaluations are generally handled by exchange of appropriate materials, e.g. class syllabi, notes, and exams. Student evaluations are mandatory for all classes, in accordance with University policy. New faculty may be inexperienced in teaching and during their evaluation period must demonstrate improvement in teaching effectiveness. The faculty candidates are expected to be effective, fair and enthusiastic teachers as reflected by teaching evaluation methodologies, mentioned above. Faculty promotion file may include other measures of teaching efficiency, such as alumni references, exit interviews, or teaching portfolios.

Creation of new courses or modification of current courses is another criterion for evaluation of the faculty's teaching performance. The quality and number of new courses can serve to provide a measure of faculty's teaching performance. Any efforts towards designing innovative methods of teaching would be considered favorable for the promotion process. Examples include research to understand modern pedagogical methods in cohort universities, attending educational conferences creation of online classes, creation of interactive courses, creation of project-based courses, among others.

For broader impact of faculty's research and to better prepare students for jobs of the future, faculty must develop new or modify existing courses to incorporate aspects of their scientific endeavors.

Research category

Faculty is anticipated to demonstrate research activities that bear intellectual merit and have broader impacts. Such criteria are evaluated through the significant publications that result from such research and through funding that can be secured from federal grants, industry, and philanthropy. Further, these scholarly activities should align with the mission of the Department and/or the strategic themes of our institution to broaden and strengthen faculty's research potential through shared resources, collaboration and through the pursuit of multidisciplinary research.

External funding is an important component in sustaining a high level of scholarly research productivity. While funding alone is not a sufficient evidence of scholarship, it serves as one of the evidences of scholarly quality in the candidate's activity. Competitive funding from government agencies, e.g. National Science Foundation (NSF), Department of Defense (DoD), the National Institutes of Health (NIH), NASA, the Department of Energy (DoE), DARPA, among others, carry the highest weight. Significant efforts should be made to secure sufficient funds for summer support, graduate student support, and infrastructure support. Pursing external research funding can be accomplished through the continuous submission, as a PI or a Co-PI, of 1) intra-departmental collaborative research proposals with other faculty within the department, 2) multi-institutional collaborative proposals spanning multiple universities, 3) inter-disciplinary research proposals spanning multiple departments, and 4) international collaborative proposals submitted to non-US funding agencies. Furthermore, in the early stages of one's career, a successful researcher should submit research proposals as PI to early career programs such as the prestigious Faculty Early Career Development Program (CAREER), the Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII), and DoE Early Career Grant, to name a few. Finally, a successful faculty should also participate in collaborative research proposals that have direct impact on the department, college, and university as a whole such as the Engineering Research Centers (ERCs), Science and technology Centers (STCs), Collaborative Research in Computational Neuroscience (CRCNS), NSF Research Traineeship (NRT), Cyberinfrastructure for Sustained Scientific Innovation (CSSI), and the Major Research Instrumentation (MRI) program, to name a few. For a complete listing of NSF funding opportunities (see https://www.nsf.gov/funding/index.jsp), for the National Institutes of Health NIH (https://www.nsf.gov/funding/index.jsp), for DARPA (https://www.darpa.mil/our-research), for the Department of Defense-DOD (https://www.grants.gov/web/grants/search-grants.html, and for the Department of Energy DoE (https://www.energy.gov/science/office-science-funding/office-science-funding-opportunities) and https://www.energy.gov/articles/doe-announces-111-million-fy-2020-small-business-innovation-research-and-technology. Although these serve as good examples of programs that require collaborative efforts, other sites can be explored for additional funding opportunities.

In order to develop their research career, the candidate is expected to pursue an appropriate level of funding to support their research activity through continued submission of proposals. Proposal submissions should reflect the ever evolving research landscape and the feedback from past submissions. On the average, the faculty is expected to submit 12 proposals over the course of the tenure period. It is highly anticipated that some of these submitted research proposals will be successful in being externally funded. The amount of the received funding will depend on the type of conducted research (e.g., theoretical versus applied) along with target funding agencies (e.g., NSF, NIH, DoD, corporate) which are appropriate for the candidate's area of research. Nevertheless, at the time of tenure evaluation, faculty should have been awarded competitive grants (NSF awards have a typical budget of **$300k** , and NIH awards have a typical budget of **$500k**). Awarded fellowships for students mentored by the candidate obtained from prestigious and highly competitive programs such the NSF-Graduate Fellowship Program (GRFP), the National Defense Science and Engineering Graduate (NDSEG), Microsoft, and others should count as part of the funded grants for the candidate.

For awarded grants, where a candidate serves as a **co-PI**, it is important for the candidate to describe their involvement/contribution and the part of the budget that is associated to their research component. Co-PIs of grants are evaluated in the portion of funds specifically associated to them in the budget.

The candidate should always be aware that that the ECE department values quality over quantity and intellectual merit of the research which may take more time to yield funding as candidates persevere to publish their findings in highly regarded journals. Reviewers' comments and panel summaries on submitted proposals can serve as important measures of the quality of the candidate's proposals, whether funding is received or not, and foretells the potential for eventual success of the candidate. These reviews and panel summaries may be included by the candidate in the tenure and promotion file.

It is expected of faculty to publish at least **two major manuscripts** every year, either in a top ranked journal or a highly selective conference outcome/productivity.. Furthermore, patents will also be considered as a metric for research

Another faculty responsibility is mentoring and advising students. Faculty are expected to supervise at least **two Ph.D. students** in any given year, starting in the faculty's third year. The number of Ph.D. graduates is an important metric. Additional advising, co-advising, and mentoring of master's students will be considered towards faculty's mentoring responsibility. Student mentoring may also include master's students and/or undergraduate students (e.g., through research experience for undergraduates (REUs) and senior design projects).

Service

Service to the department, the university, and the profession is expected and anticipated to be aligned with the mission of the Department of Electrical and Computer Engineering and FIU as a whole. The department is keenly aware that faculty on tenure track, at least in their first three years should focus on service activities that could help for tenure. These include serving on review panels with NSF and other federal agencies, reviewing articles in their research areas, serving on editorial boards and on search and screen committees. The candidate could also participate, if interested, on serving as chair of major committees here at FIU or elsewhere in conference venues to affirm their leadership role. Typical service activities include: (i) serving on departmental committees, developing laboratories, supervising technical or clerical personnel, activities associated with recruiting students, and supervising the use and maintenance of departmental resources; (ii) serving on thesis or dissertation committees, on college or university committees, on search or advisory committees, as a representative of the university as an expert in a specialized area; (iii) organizing national or international symposia or workshops, serving as a member of boards of international or national symposia, an officer in professional societies, referee or reviewer for funding agencies, professional journals, or textbook publishers, editorial boards of journals. Per college's mission of community engagement, faculty's participation in outreach (through the university or self-organized) will also be considered during tenure evaluation.

PROMOTION ELIGIBILITY

   a) *Promotion from Research Assistant to Research Associate Professor Rank*

At the level of Research Assistant Professor, establishing a record as a scholar in his/her area of research should be a major focus for promotion. Therefore, the candidate is not expected to heavily engage in service related activities; however, he/she should display a willingness to engage in service activities. The candidate should demonstrate great potential for research and an appropriate level of funding as outlined earlier in the *Research* Section of *Evaluation Criteria*. The candidate's scholarly record is measured by the quality of the publications as reflected in the type of journal or conference venue they were published and in citations of the candidate's work by other scholars in the field; particularly, his/her record will be compared to that of outstanding scholars in the same discipline in equivalent ranks in other national institutions which are in the R1 category of the Carnegie classification with Highest Research Activities.

b) Promotion to Research Professor Rank

For promotion to the rank of Research Professor, the candidate's entire professional career is assessed, with particular emphasis placed on development while serving in the rank of Research Associate Professor. The candidate must have demonstrated evidence of high and sustained professional standing in research, and service. Promotion to the rank of Research Professor requires higher levels of performance, measured in both quality and quantity, compared to that required for promotion to Research Associate Professor, and requires evidence of national and international stature.

The candidate's scholarly record is measured by citations of the candidate's work by other scholars in the field and by other merits such as honors and awards for scholarship, invited talks and presentations, and sustained funding from federal agencies, industry and philanthropy as confirmation of the intellectual merit and broader impact of the candidate's scholarly activities.

The candidate's record should demonstrate willingness to participate in departmental and university affairs. Service, leadership, and maturity are relatively more important. The candidate should have reached the stature needed to serve as a mentor to junior faculty. The mentorship role is critical in the success of the junior faculty, which in turn is paramount to the success of the department and the institution that have invested in the career of the junior faculty, akin to return on the investment.

c) Promotion from Teaching Assistant Professor to Teaching Associate Professor

The candidate is expected to consistently have excellent SPOT (Student Perception Of Teaching) evaluations. He/she should have the ability to teach a wide variety of undergraduate courses in order to effectively support the department in its teaching mission. The candidate is expected to mentor senior projects once in while. The candidate is expected to be familiar in the different modes of teaching like online, hybrid, and fac-to-face. Finally he/she should be well verse in the use of Learning Management Systems such as Canvas or others of the kind.

d) Promotion from Teaching Associate Professor to Teaching Professor

Promotion to the rank of Teaching Professor requires higher levels of performance, measured in both quality and quantity, compared to that required for promotion to Teaching Associate Professor. In addition to the requirements for promotion to Teaching Associate Professor, the candidate is expected to bring innovation in the discipline of teaching. Examples are new way of evaluating students, updating fundamental courses to take advantage of new technology. He/she is expected to attend educational conferences to learn about the latest innovations in the field of teaching.

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